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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/895,944	06/29/2001	Lawrence Bergman	YOR920010406US1	9336

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EXAMINER

MILEF, ELDA G

ART UNIT	PAPER NUMBER
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3628

DATE MAILED: 07/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/895,944

Applicant(s)

BERGMAN ET AL.

Examiner

Elda Milef

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 29 June 2001.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-45 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-45 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 June 2001 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Regarding claim 33: The Examiner noted that claim 33 contains a computer-readable code means however, the structure of the claim is not that of a means plus function claim invoking 112 (6th). Clarification is required. See MPEP §2181.

Drawings

The drawings are objected to because Figure 1 (104) is labeled "Electronic Marketplace" and the specification p. 11, line 10 refers to (104) as "market makers". Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet"

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or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Specification

The abstract of the disclosure is objected to because line 11 contains a typographical error "cam" should be -can--. Correction is required. See MPEP § 608.01(b).

The disclosure is objected to because of the following informalities: p. 19 line 27, "The final representation 1308" should be --The final representation 1307--;

p. 25 line 5 "the rain tomorrow 182" should be --the rain tomorrow 1812--;

Appropriate correction is required.

Claim Objections

Claim 25 is objected to because of the following informalities: line 26, "to of access" should be -to access--. Appropriate correction is required.

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Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3, 15, 33-45 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Re claim 3: It is not clear what is being compared in this limitation. The wording of this limitation can not be easily comprehended, i.e. "comparing the additional information from the request and the request with the additional information."

Re claims 15, 31, 44: It is not clear what is being exchanged. Is the seller receiving funds after completion of the exchange?

Claim 33 is rejected because a computer readable code means cannot comprise steps. The Examiner suggests that the applicant change the step limitations to include wording such as "instructions to".

Claim 34-45 are rejected because of their dependency to rejected claim 33.

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Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

Claims 1-45 are rejected under 35 U.S.C. 101 because the steps of collecting, analyzing, and matching do not provide a practical application of an idea resulting in a useful, concrete, and tangible result. Re claims 1, 20, and 33 of the claimed invention relate to collecting analyzing, and matching data. Accordingly, a tangible and useful result is not realized and the claims are therefore rejected under 35 U.S.C. 101. See MPEP § 2106 II (A), and State Street, 149 F.3d at 1373, 47 USPQ2d at 1601-02.

Claims 2-19, 21-32, and 34-45 are rejected because of their dependency to rejected claims 1, 20, 33.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

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(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1-5, 10, 14-15, 18-22, 26, 30-35, 39, 43-45 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller et al. (US PG. Pub. No. 2002/0026369) in view of Goldberg et al. (US Patent No. 6,985,885).

Re claims 1-5,14: Miller disclose:

For examination purposes, claim 3 will be interpreted to mean the step of matching the request with at least one of the offered information goods by comparing the additional information from the request with the additional information from the at least one offered information good.

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collecting a request from a buyer for a requested good;
analyzing the request to create additional information from the request ("receiving a request for information about an item, the request is parsed to determine attributes of the item such as functional attributes as well as physical attributes...")-see [0007];

collecting one or more offered goods from one or more sellers ("A search of a database is performed for selecting a plurality of products each having the attributes of the item.")-see [0008] and ("the present invention...comes up with the products that match and the product with all the locations to get the product from(multiple stores/sites, etc.)")-see [0009];

analyzing each of the offered goods to create additional information from the good("A search of a database is performed for selecting a plurality of products each having attributes of the item... Information about the products is retrieved and output.") [0007]; and

matching the request with at least one of the offered goods by matching and comparing the additional information from the request with the additional information from the at least one good and the step of selecting the ate [sic] least one offered good as a best match ("A system, method and article of manufacture are provided for matching products to a textual

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request.")-see [0007] and ("A matching algorithm of the present invention marries products together and provides products that have attributes that are most similar to the description input by the user.")-see [0009];

wherein the step of analyzing the request further comprises the step of analyzing the request to create annotations, and wherein the step of analyzing each of the one or more offered goods further comprises the step of analyzing each of the one or more offered goods to create annotations-see "attributes" [0007-0009]; wherein each of the annotations comprises model information-see "information about the products" [0008];

Although Miller does disclose an item or consumer good, see [0006], Miller does not specifically disclose information goods and digital goods. Goldberg however, teach a system and method for pricing and selling digital goods. -see cols. 3-4. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Miller to include digital goods as taught by Goldberg in order to provide the consumer with a varied array of products to purchase.

Re claim 10: Miller disclose:

wherein each of the offered goods has

a price associated with the good and wherein the step of matching further comprises dynamically determining prices of the offered goods.-see [0218]. Although Miller does disclose an item or consumer good, see [0006], Miller does not specifically disclose information goods. Goldberg however, teach a system and method for pricing and selling digital goods. -see cols. 3-4. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Miller to include digital goods as taught by Goldberg in order to provide the consumer with a varied array of products to purchase.

Re claim 15: For examination purposes, claim 15 will be interpreted as further comprising the step of matching the at least one offered information good and the requested information good. Claim 15 has similar limitations found in claim 1 above, therefore are rejected by the same rationale.

Re claim 18: Miller disclose the trading mechanisms consisting of fixed-price and auction -see[0008], [215-219], Miller do not specifically disclose price discrimination, and subscription. Goldberg, however teaches price discrimination-see col. 12 lines 27-41. Official notice is taken that it is old and well known in the art of e-commerce that subscription is a method of selling information goods such as online subscriptions to Consumer Report magazine. It would have been

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obvious to one having ordinary skill in the art at the time the invention was made to modify Miller to include various pricing techniques, and subscription pricing as was taught by Goldberg and is old and well known in the art in order to give the sellers options in pricing goods that maximize the seller's profit potential.

Re claim 19: Miller do not disclose the step of decomposing an offering of one of the offered information goods, and wherein the step of matching further comprises the step of comparing decompositions of the one offered information good with the request and the additional information from the request. Goldberg however, teaches ("the vendor could capitalize on consumer price discrimination by offering a modified form of the goods which would be less appealing to consumers who place with utility value on the item, but which would still be appealing to consumers who place a low utility value on the item. For example, the vendor could create a version of the goods that did not include some of the features or functions valued by the high-end customers. The vendor could then hold separate auctions for each class of goods, setting a reserve price on the high-end version of the goods, the reserve price being greater than the utility values exhibited by the consumers of the low-end version. Thus, the use of a stable

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auction mechanism enables the vendor to accurately observe market distributions and to adapt in an optimal fashion.")-see col. 12 lines 27-41. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Miller to include modifying products to create versions of the digital good that do not have all the components offered to high-end consumers as taught by Goldberg in order to attract consumers who would not want to pay the high price associated with the more expensive version of the good.

Re claims 20,21-22, 26, 30,31, 32: Further a system would have been necessary to perform the method of previously rejected claims 1, 4-5, 10, 14, 15, 19 respectively, and are therefore rejected using the same art and rationale.

Re claims 33, 34-35, 39, 43, 44, 45: Further an article of manufacture would have been necessary to perform the method of previously rejected claims 1, 4-5, 10, 14, 15, 19 respectively, and are therefore rejected using the same art and rationale.

Claims 6-9, 11-13, 16-17, 23-25, 27-29, 36-38, 40-42 are rejected under 35 U.S.C. 103(a) as being unpatentable over Miller in view of Goldberg as applied to claims 1, 20, and 33 above, and further in view of Haddawy (Haddawy, Peter. An

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Overview of Some Recent Developments in Bayesian Problem-Solving Techniques. AI Magazine. La Canada: Summer 1999, Vol. 20, Iss. 2; pg. 11, 9 pgs.)

Re claims 6, 7: Miller and Goldberg do not specifically disclose wherein the step of analyzing the request further comprises the step of creating at least one inference from the request, and wherein the step of analyzing each of the one or more offered information goods further comprises the step of creating at least one inference from each the offered information goods; wherein each inference is created through deduction. Haddawy teaches ("The articles cover the topics of inference in Bayesian networks...Observations are continuously input into a Bayesian model and a probability distribution over user needs is inferred...The expectation-maximization algorithm iterates through two steps:...Any Bayesian network inference algorithm can be used...")-see p.1 par. 1- p. 6 par. 4.

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It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Miller and Goldberg to include analyzing data using the inference techniques taught by Haddawy in order to facilitate the analysis of data to provide the user with an appropriate course of action that will maximize utility.

Re claims 8,9: Miller and Goldberg do not disclose wherein the step of analyzing the request further comprises the step of accessing at least one request knowledge model, and wherein the step of analyzing each of the offered information goods further comprises the step of accessing at least one offered knowledge model. Haddawy teaches knowledge based model construction using Bayesian networks-see pp. 1-5. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Miller and Goldberg to include using a knowledge based model such as Bayesian networks as taught by Haddawy in order to facilitate the analysis of data to provide the user with an appropriate course of action that will maximize utility.

Re claim 11, 13: Although Miller do disclose dynamically determining prices in [218], Miller and Goldberg do not specifically disclose creating an influence diagram comprising node and arc, each arc connecting one node with another node;

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and dynamically determining prices comprises the step of maximizing utility. Haddawy however, teaches ("Influence diagrams (Howard and Matheson 1984) are a generalization of Bayesian networks for analyzing courses of action. In addition to chance nodes, they contain decision and value nodes...")-see p. 2 para. 3 and ("The optimal act is the one that maximizes expected utility...")-see p. 1 para. 3. It would have been obvious to one having ordinary skill in the art at the time the invention was made to modify Miller and Goldberg to include using an influence diagram to analyze a course of action as taught by Haddawy in order to maximize expected profits for the seller and maximize utility for the buyer and seller.

Re claim 12: Although Miller and Goldberg disclose the step of dynamically determining prices, Miller and Goldberg, do not specifically disclose the step of updating expectations and probabilities through Bayesian updating selecting from a group consisting of linear Bayes updating and updating with decisions. Haddawy however, teaches ("Influence diagrams (Howard and Matheson 1984) are a generalization of Bayesian networks for analyzing courses of action. In addition to chance nodes, they contain decision and value nodes. They share all the benefits of Bayesian networks."). It would have been obvious to one having ordinary skill in the art at the time the invention was made to

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modify Miller and Goldberg to include using Bayesian networks for analyzing courses of action and determining probability of random variables as taught by Haddawy in order to maximize expected profits for the seller and maximize utility for the buyer.

Re claim 16: Miller and Goldberg disclose the steps of analyzing the request and the step of analyzing each of the offered information goods in claims 4 and 5 above, and matching comprises comparing the request, annotations and offered information goods and annotations -see Miller [0007-0009] :

Haddawy further discloses using inference in Bayesian networks to determine an optimal act that maximizes expected utility. Haddawy teaches inference techniques to analyze data in order to aid in decision making-see pp. 1-6. It would be obvious to use the inference techniques in Bayesian networks to infer a user's goals and needs as taught by Haddawy in order to maximize profit for seller and to minimize cost for the buyer. It would have been obvious to one having ordinary skill at the time the invention was made to include inference techniques to analyze data as taught by Haddawy in order to maximize utility for both the buyer and seller.

Re claim 17 has similar limitations found in claim 7 above, therefore is rejected by the same rationale.

Re claim 23-25, 27-29: Further a system would have been necessary to perform the method of previously rejected claims 6-8, 11-13 and are therefore rejected using the same art and rationale.

Re claim 36-38, 40-42: Further an article of manufacture would have been necessary to perform the method of previously rejected claims 6-8, 11-13 and are therefore rejected using the same art and rationale.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

US Patent No. 6,131,087 (Luke et al.)-cited for a method for automatically identifying, matching, and near-matching buyers and sellers in electronic market transactions.

Clemen, Robert T., Fischer, Gregory W. and Robert L. Winkler. *Assessing Dependence: Some Experimental Results*. Management Science: Aug 2000; 46, 8; pg. 1100 - cited for its reference to Bayes net, influence diagrams.

Easton, Fred F. and Madeleine E. Pullman. *Optimizing Service Attributes: The Seller's Utility Problem*. Decision Sciences. Volume 32, 2, Spring 2001, pg. 251 - cited for its

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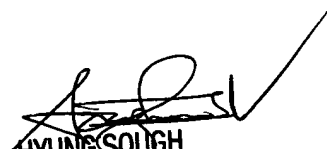
reference to an influence diagram showing nodes and arcs used to choose the levels for price and other product and process attributes to maximize expected profits.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elda Milef whose telephone number is (571)272-8124. The examiner can normally be reached on Monday -Thursday 8:30 am to 4:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hyung Sough can be reached on (571)272-6799. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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